Hydrazine, butyl-

Other names: Butylhydrazine
Inchi: InChI=1S/C4H12N2/c1-2-3-4-6-5/h6H,2-5H2,1H3
InchiKey: XKLVLDXNZDIDKQ-UHFFFAOYSA-N
Formula: C4H12N2
SMILES: CCCCNN
Mol. weight [g/mol]: 88.15
CAS: 3530-11-8

Physical Properties

Property code	Value	Unit	Source
gf	138.64	kJ/mol	Joback Method
hf	-38.63	kJ/mol	Joback Method
hfus	16.41	kJ/mol	Joback Method
hvap	41.58	kJ/mol	Joback Method
ie	9.04	eV	NIST Webbook
log10ws	-1.11		Crippen Method
logp	0.250		Crippen Method
mcvol	87.180	ml/mol	McGowan Method
pc	4260.71	kPa	Joback Method
rinpol	822.00		NIST Webbook
rinpol	822.00		NIST Webbook
tb	413.62	K	Joback Method
tc	600.57	K	Joback Method
tf	270.76	K	Joback Method
vc	0.324	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	175.61	J/mol×K	413.62	Joback Method
cpg	185.23	J/mol×K	444.78	Joback Method
cpg	194.44	J/mol×K	475.94	Joback Method
cpg	203.25	J/mol×K	507.09	Joback Method
cpg	211.69	J/mol×K	538.25	Joback Method

cpg	219.74	J/mol×K	569.41	Joback Method
cpg	227.44	J/mol×K	600.57	Joback Method

Sources

Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C3530118&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
ie:	Ionization energy
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume